



PATENT
Attorney Docket No.: 021290-000100US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BETTI-BERUTTO et al.

Application No.: 10/022,012

Filed: December 14, 2001

For: HIGH GAIN WIDEBAND DRIVER
AMPLIFIER

Examiner: Mottola, Steven J.

Art Unit: 2817

AMENDMENT

4/A
JMA
4-5-03
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APR - 3 2003
TECHNOLOGY CENTER 2800

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action mailed December 31, 2002, please amend
the above-identified application as follows:

IN THE SPECIFICATION:

Please replace paragraph 3, beginning at page 1, line 20, with the following amended
paragraph:

a!
--Recent advances in optical and semiconductor processing technologies
are enabling 40 Gb/s systems to move from research laboratories to production ready
systems that can be manufactured in large volumes. However, the design of various
functional blocks, especially at the interface with the fiber, remains a challenging task.
For example, one of the most critical circuits in an optical transmitter is the amplifier in
the optical modulator that drives the fiber. At the 40 Gb/s rate, the amplifier must exhibit
very large bandwidth. It is also required to drive a relatively large signal (e.g., > 7Vpp).
The large bandwidth requires smaller and faster transistors while the higher voltage
operation requires the opposite. The driver amplifier is also required to perform a
limiting function to achieve a stable eye diagram at its output. These various and